



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,185	08/20/2003	Paul Harris	21295.57(H5653US)	5557
29127	7590	07/16/2008		
HOUSTON ELISEEVA 4 MILITIA DRIVE, SUITE 4 LEXINGTON, MA 02421			EXAMINER PRAKASAM, RAMYA G	
			ART UNIT	PAPER NUMBER
			3651	
			MAIL DATE	DELIVERY MODE
			07/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/644,185

Applicant(s)

HARRIS ET AL.

Examiner

RAMYA G. PRAKASAM

Art Unit

3651

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☒ Claim(s) 46-53 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-893)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 11/15/05

DETAILED ACTION

Claim Objections

1. The claims are objected to because, as provided in 37 CFR 1.75(i), where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. Appropriate correction is required.

Claims 46-53 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend in a “as claimed in any of the preceding claims” fashion. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-45 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nakamura (US Patent No. 6,236,904).

5. Nakamura discloses a substrate loading and unloading apparatus comprising a substrate holder with a substrate support table and locating means co-operable with the table (See Figure 1 and Column 3, lines 59-67 and Column 4, lines 1-12), a vacuum vessel defining a loading and unloading chamber with a transfer port (See Column 3, lines 59-67 and Column 4, lines 1-12). which is communicable in use with an evacuated region, and release means for withholding cooperation of the locating means and the table (See Figure 1) and providing a temporary substrate support clear of the table (See Figure 1).
6. Re Claims 2 -6: the locating means comprises resilient means to cause a supported substrate to be biased towards the table and defines a reference plane (sensor), where the reference plan is defined by three spaced apart contact points (See Column 3, lines 59-67 and Column 4, lines 1-12).
7. Re Claims 9-17: the apparatus has a release means comprising a displacing means with at least one displacing member movable to engage and depress the table (See Figure 2 and Column 4, lines 15-32), comprising a pusher and drive means.
8. Re Claims 18-42: Apparatus contains a temporary support means (1) movable upwardly through passage means in the table (See figure 4). The temporary support means comprises at least 3 support pins.
9. Re Claim 43: apparatus contains a transfer port (See Column 3, lines 59-67 and Column 4, lines 1-12).
10. Re Claim 44: vessel is substantially boxed shaped (See Figures)
11. Re Claim 45: apparatus is constructed as a module attached to a substrate processing machine (See Figures)

12. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of Tanigawa (U.S. Patent Application No. 2001/0022930).

13. Nakamura discloses all claimed limitations except for the use of a strong as a resilient mounting means. Tanigawa utilizes a spring (41) as a resilient mounting means for the purpose of holding a carrier containing a substrate (See Paragraphs 102 – 103). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Nakamura by utilizing a spring as a resilient mounting means for the purpose of holding a carrier containing a substrate.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAMYA G. PRAKASAM whose telephone number is (571)272-6011. The examiner can normally be reached on Monday - Thursday, 8:30am-7pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gene Crawford/
Supervisory Patent Examiner, Art Unit
3651

6/23/2008
RGP